

REMARKS

Applicants would like to thank the Examiners for courtesy extended during the interview on April 10, 2003. Claims 1-27 are now pending in the application. Claims 1, 11, and 21 are amended herein. Support for the amendments appears in paragraph 64 and other portions of the specification. No new matter has been entered. The Examiner is respectfully requested to reconsider and withdrawal the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Applicants traverse the rejection of Claims 1, 2, 6-8, 11, 12, 16-18, 21-23 and 26 under 35 U.S.C. § 103(a) as being anticipated by Tang (U.S. Pat. No. 5,811,905) in view of Takeuchi et al. (U.S. Pat. No. 5,583,387) and Oki (Japanese Patent No. 411289701A).

During the interview, Applicants pointed out the synergistic effects of a switched reluctance machine having a segmented stator, high slot fill and a sensorless rotor position circuit. By segmenting the stator, the slot fill can be increased and precision winding methods can be employed. For example, the stator segments can be wound using CNC winding machines. The precision winding methods allow the winding wire to be precisely positioned on the stator segments. The precision winding methods are not possible with non-segmented stators. The precision winding methods improve the uniformity of resistance and inductance characteristics of the stator segment assemblies.

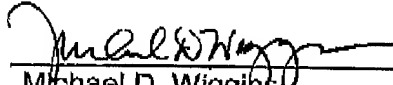
The sensorless rotor positioning sensing circuit measures parameters that relate to the inductance and/or resistance characteristics of the stator segments. As a result of the improved electrical uniformity and lower variation in inductance and resistance, less costly sensorless drive circuits can be employed and/or more accurate control can be achieved. Applicants respectfully assert that none of the references, alone or in combination, teach the use of a segmented stator in a switched reluctance machine having high slot fill and employing a sensorless rotor position circuit. Therefore, Applicants respectfully assert that Claims 1, 11 and 21 are allowable over the prior art references cited by the Examiner. The remaining claims are either directly or indirectly dependent on Claims 1, 11 and 21 and are allowable for the same reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1211.

Respectfully submitted,

Dated: 4/17/03

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